The State of Asthma

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Components:
– Surveillance
– Partnerships
– Interventions
The Asthma Surveillance Pyramid

- Quality of Life
- Cost
- Pharmacy
- Hospitalization
- ED/Urgent Care
- Unscheduled Office Visits
- Scheduled Office Visits
- Asthma Prevalence/Severity
- Causal Factors
- Triggers
- Mortality
National Asthma Surveillance Summaries

- **National Measures**: current prevalence, attack prevalence, physician office visits, emergency department visits, hospital outpatient visits, hospital discharges, and mortality

- **#4 New Format**: NCHS Series 3 Report

- **Publication**: November 8, 2012

Prevalence (%)

Year

Source: National Health Interview Survey; National Center for Health Statistics
Recent demographics

Prevalence is higher:

- in children than in adults
- in boys than in girls
- in adult women than in adult men
- in Puerto Ricans and in blacks than in whites
- in persons with family income below the federal poverty threshold than above
- in the Northeast and Midwest than in the South

* 2008-2010 average annual estimates
One or More Asthma Attacks: United States, 1997-2011

Source: National Health Interview Survey; National Center for Health Statistics
Recent* demographics

Among those with current asthma, attacks in the past year are reported more frequently:

- by children than by adults
- by women than men
- by those living in the South and West than those in the Northeast±
- by adults with income below 250% of the Federal poverty level than with higher income

± Opposite of prevalence

* 2008-2010 average annual estimates
Asthma Office Visits* and Rates: United States, 1980 – 2009

PBR per 1K

ARR per 100

Number of Visits

Rate

Year

Source: NAMCS; National Center for Health Statistics
* First-listed diagnosis; PBR population-based rate; ARR at-risk-rate
Recent* demographics: for risk-based rates

Asthma office visits are more frequent for:

- children than adults
- children aged 0-4 years than all other age groups
- persons living in the South than in the Midwest
- Hispanics than non-Hispanics

There is no difference in asthma office visit frequency between:

- males and females
- whites and blacks

* 2007-2009 average annual estimates
Asthma Hospital Outpatient Visits* and Rates:
United States, 1992 – 2009

Source: NHAMCS; National Center for Health Statistics
* First-listed diagnosis; PBR population-based rate; ARR at-risk-rate
Asthma hospital outpatient visits are more frequent for:

• children than for adults
• children aged 0-4 years than all other age groups
• blacks than for whites
• Hispanics than non-Hispanics

There is no difference in asthma outpatient visit frequency between:

• males and females
• geographic regions

* 2007-2009 average annual estimates
Asthma ED Visits* and Rates: United States, 1992 – 2009

Source: NHAMCS; National Center for Health Statistics
* First-listed diagnosis; PBR population-based rate; ARR at-risk-rate
Recent* demographics: for risk-based rates

Asthma emergency department visits are more frequent for:

- children than for adults
- children aged 0-4 years than all other age groups
- blacks than whites
- Hispanics than non-Hispanics
- persons in the Northeast and in the South than in the West

There is no difference in asthma emergency department visit frequency between:

- males and females

* 2007-2009 average annual estimates
Asthma Hospital Discharges* and Rates: United States: 1979 - 2010

Source: NHDS; National Center for Health Statistics
* First-listed diagnosis; PBR population-based rate; ARR at-risk-rate
Recent demographics: for risk-based rates

Asthma hospital discharges are more frequent for:

- children aged 0-4 years and adults age 65+ than other age groups
- blacks than whites
- persons in the Northeast than in the Midwest

There is no difference in asthma hospital discharge frequency between:

- children and adults
- males and females

* 2007-2009 average annual estimates
Health care encounter rates per 100 persons with asthma by age, sex, and race: United States, average annual 2007-2009

Source: National Surveillance of Asthma: United States, 2001-2010
Health care encounter rates per 100 persons with asthma by age, sex, and race: United States, average annual 2001-2003 & 2007-2009

Asthma Deaths* and Rates: United States, 1979-2010

Source: NVSS; National Center for Health Statistics
*Underlying Cause of Death; PBR population-based rate; ARR at-risk-rate
Recent* demographics: for risk-based rates

Asthma deaths are more frequent for:

- adults than for children
- adults age 65+ than all other age groups
- females age 65+ than males age 65+
- blacks than whites
- non-Hispanics than Hispanics
- persons in the West and in the South than in the Midwest

There is no difference in the frequency of asthma deaths between:

- males and females under age 65

* 2007-2009 average annual estimates
Summary

Prevalence: number and prevalence percent increasing over time

Persons reporting attacks:
  Number increasing over time
  Proportion among those with current asthma decreasing over time

Health care encounters:
  Office visits and hospital outpatient department visits:
    Number and Pop-based rate increasing over time
    Risk-based rates decreasing over time
  Emergency department visits and hospitalizations:
    Number increasing very slightly over time
    Pop-based rate level or decreasing very slightly
    Risk-based rate decreasing markedly

Mortality: number, pop-based and risk-based rates decreasing since 1998
Conclusion

Decreases in all the risk-based rates provide indirect evidence of improvement in asthma management during a long period of increasing asthma prevalence.
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For more data:  
http://www.cdc.gov/asthma/asthmadata.htm